# M 5.9, 46 km SW of Khst, Afghanistan
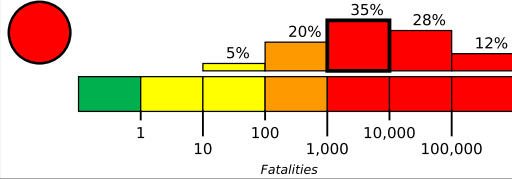
Origin Time: 2022-06-21 20:54:36 UTC (Wed 01:24:36 local)
Location: 33.0924° N 69.5135° E Depth: 10.0 km

**PAGER**
**Version 6**

Created: 1 week, 3 days after earthquake

## Estimated Fatalities

🔴

5% | 20% | **35%** | 28% | 12%

1 | 10 | 100 | 1,000 | 10,000 | 100,000
*Fatalities*

Red alert for shaking-related fatalities. High casualties are probable and the disaster is likely widespread. Past events with this alert level have required a national or international level response.

Orange alert for economic losses. Significant damage is likely. Estimated economic losses are less than 1% of GDP of Pakistan.

## Estimated Economic Losses

🟠

5% | 20% | **35%** | 28% | 10%

1 | 10 | 100 | 1,000 | 10,000 | 100,000
*USD (Millions)*
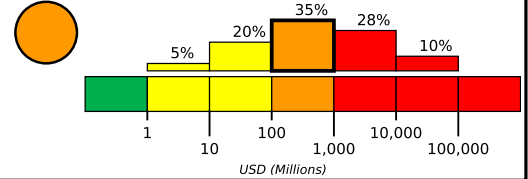
## Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) | | –* | 10,834k* | 22,640k | 1,634k | 397k | 148k | 75k | 18k | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
| ESTIMATED MODIFIED MERCALLI INTENSITY | | **I** | **II-III** | **IV** | **V** | **VI** | **VII** | **VIII** | **IX** | **X+** |
| PERCEIVED SHAKING | | Not felt | Weak | Light | Moderate | Strong | Very Strong | Severe | Violent | Extreme |
| POTENTIAL DAMAGE | Resistant Structures | None | None | None | V. Light | Light | Moderate | Mod./Heavy | Heavy | V. Heavy |
| | Vulnerable Structures | None | None | None | Light | Moderate | Mod./Heavy | Heavy | V. Heavy | V. Heavy |

*Estimated exposure only includes population within the map area.

## Population Exposure

population per 1 sq. km from Landscan

0 | 5 | 50 | 100 | 500 | 1000 | 5000 | 10000
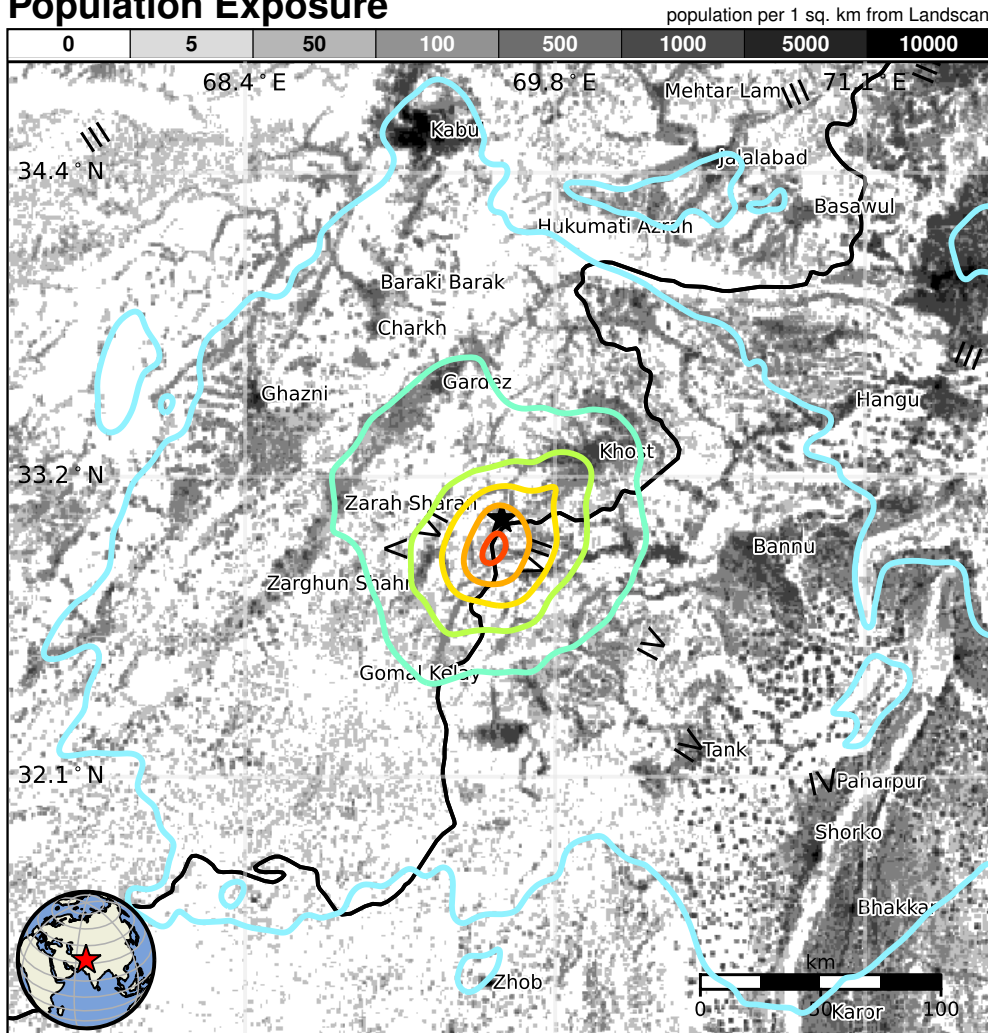


## Structures

Overall, the population in this region resides in structures that are extremely vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are informal (metal, timber, GI etc.) and adobe block construction.

## Historical Earthquakes

| Date (UTC) | Dist. (km) | Mag. | Max MMI(#) | Shaking Deaths |
|---|---|---|---|---|
| 2006-10-09 | 368 | 4.4 | V(343k) | 0 |
| 2002-03-25 | 330 | 6.1 | VII(49k) | 1k |
| 1974-12-28 | 378 | 6.2 | VIII(6k) | 5k |

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

## Selected City Exposure

from GeoNames.org

| MMI | City | Population |
|---|---|---|
| VIII | Ster Giyan | <1k |
| VII | Sperah | <1k |
| VII | Zerok-Alakadari | <1k |
| VI | Urgun | <1k |
| VI | Nikeh | <1k |
| VI | Dwah Manday | <1k |
| V | **Gardez** | **104k** |
| IV | **Ghazni** | **141k** |
| IV | **Kabul** | **3,044k** |
| IV | **Jalalabad** | **200k** |
| IV | Peshawar | 1,219k |

bold cities appear on map. (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.
https://earthquake.usgs.gov/earthquakes/eventpage/us7000hj3u#pager

Event ID: us7000hj3u